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| **Representative TN Math Standards**  *Kindergarten* –  **Know number names and the count sequence**  *CCSS.Math.Content.K.CC.A.2* Count forward beginning from a given number within the known sequence (instead of having to begin at 1).*CCSS.Math.Content.K.CC.A.3* Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). **Count to tell the number of objects.**  *CCSS.Math.Content.K.CC.B.4.a*  When counting objects, say the number names in the standard order, using one-to-one correspondence*CCSS.Math.Content.K.CC.B.4.b*  Recognize that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. | |
| **Revised Bloom’s Taxonomy Question Prompts**  Level 1 - Remembering: Can you point to the picture of the 8 elephants?  Level 2 - Understanding: Explain how you would measure the length of your desk using paper clips.  Level 3 - Applying: Measure the length of your desk using paper clips.  Level 4 - Analyzing: If this many dots were on a ten-frame, how many blank spaces would there be? (*Note: this could also be considered knowledge but with Kindergarten I viewed it as analysis*)  Level 5 - Evaluating: Compare a list of relationships about the number 6 with your partner and justify any differences.  Level 6 - Creating: Generate a list of important relationships you can think of about the number 6. Illustrate your list when possible. | |
| :TenFlashingFireflies.JPG | Used to develop the benchmark of 10   * Includes an addition number sentence on the left page and the inverse number sentence on the right. * Create 10 felt fireflies on clothespins using the template – add googly eyes & use chenille stems for antennae. * Select 10 students to wear the fireflies. Designate an area of the room as the “bug jar” (or create an outline on the floor) * Ask the “fireflies” to flit about the room as you read the story. Catch them in the bug jar as you read the story and write the corresponding addition or subtraction number sentence. |

**Virtual Manipulatives**

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| *Count Us In* <http://www.abc.net.au/countusin/default.htm>  **GAME 5 - Representing Number**  Objective: The player has to move a feather with a number of objects to the correct corresponding text number.  **GAME 7 – Addition – Part-Part Whole Relationships**  Objective: There is a picture of a double-decker bus with children standing alongside. The bus has windows on each level. The Player moves the children onto the bus to make the number that is displayed on the top of the screen.  The number of the bus is random, and the children an be placed in any order. |
| *Ten Frame (NCTM Illuminations Tools)* <http://illuminations.nctm.org/Activity.aspx?id=3565>  A nice manipulative version of the ten-frame. Probably best used by the teacher or at a learning station because the text is quite small. Students use counters and enter a number that answers a question. There is also a five-frame applet. |

**iPad Apps** (10 minutes)

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| **Title** | **Description** |
| Bugs & Buttons - *Firefly sky*  :::Screen Shot 2012-09-06 at 1.42.40 PM.png | Skills: counting – by catching fireflies in a jar |
| Math Doodles – *Sums Stacker*  :::Screen Shot 2012-09-06 at 1.31.09 PM.png | Numbers are piled into 3 stacks. Stacks are assigned a target sum. Move numbers around to read target sum. Uses different representations of numbers (dice, fingers, ten frames, etc.) |
| Numbers League  :::Screen Shot 2012-09-06 at 1.31.38 PM.png | Assemble a team of superheroes and use their sum to capture villains |
| Friends of Ten  :::Screen Shot 2012-09-06 at 1.32.54 PM.png | Understanding numbers up to ten, subitizing, counting on & back |

**Activities from the textbook**

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| **Activity** | **Brief Description** | **Materials Needed** |
| *Subitizing*  8.1 Learning Patterns  8.2 Dot Plate Flash | Hold up dot plate 5 seconds; ask students to recreate & describe pattern; ask partners to test each other | Dot Plates  Counters |
| *Counting On*  8.8 & 8.9 Real Counting On  \*add on counting back | Player 1 – turn over top # card & place # of counters in cup; Player 2 – roll die and place # of counters beside cup; Player 3 – record #s on sheet; all decide total # of counters | Per group: Cards 1-7  Number die, cup, counters, recording sheet |
| *Anchoring #s to 5 & 10*  8.16 Number Medley &  8.17 Ten-Frame Flash | Flash 10 frames and see how fast group can tell how many dots are shown  Variations: say # of spaces; one or two more & less; Say the “10 fact”; add flashed card to card they have at their desk | Ten Frames |
| *Part-Part-Whole*  8.18 Build it in Parts | How many different combinations for a particular # can be made using two (or more) parts. | Connecting cubes  Cuisenaire rods |
| *Missing Part*  8.20 Covered Parts | Target amount (6) of counters is hidden by student 1; some counters are pulled out (4); student 2 says “four and two is six” | Counters |
| *Dot Cards for Teaching Number Relationships*  8.23-8.25 | Double War; Difference War; & Number Sandwiches | Dot Cards |
| *Pre-Place Value Concepts (Teens)*  8.26 Ten and Some More | Fill one frame with counters; add singles to 2nd frame; count all by ones, then by ten and #. | Double-Ten Frame Mat per student  Counters |

**Additional Activity: Number Bracelet;** 10 minutes

**Materials**: Chenille Stem & 7 beads per person

Students thread beads on chenille stem and twist ends together to form a bracelet. Separate the beads to make number sentences such as 4+3=7. Also flip to show that 3+4=7. Show other addition and subtraction sentences.

**Lesson Plan**

Spiders have 8 legs

<http://illuminations.nctm.org/LessonDetail.aspx?id=L870>

Students represent number eight in writing and with a variety of manipulatives. They will construct sets of 8 by cutting 8 strips of paper and counting 8 pretzel sticks that represent spider legs. They will also use 8 plastic spiders to show 8 with a ten frame and count on from a given number to make 8.

*Note*: Ten Flashing Fireflies & Number Bracelet Activity found in *Number Wonders: 171 Activities to Meet Math Standards and Inspire Students, K-2* by Catherine Jones Kuhns, 2006. Crystal Springs Books